DOCUMENT RESUME

ED 430 088 CE 078 551

| | |
|---|---|
| AUTHOR | Freebody, Peter; Freiberg, Jill |
| TITLE | Adult Literacy and Health. Reading and Writing as Keeping-Well Practices. Research into Practice Series No. 5. |
| INSTITUTION | National Languages and Literacy Inst., Melbourne (Australia). |
| ISBN | ISBN-1-875578-80-3 |
| PUB DATE | 1997-00-00 |
| NOTE | 24p. |
| AVAILABLE FROM | Adult Basic Education Resource and Information Service, National Languages and Literacy Institute of Australia, GPO Box 372F, Melbourne, Victoria, Australia 3001 ($6). |
| PUB TYPE | Reports - Research (143) |
| EDRS PRICE | MF01/PC01 Plus Postage. |
| DESCRIPTORS | Adult Basic Education; *Adult Literacy; Cultural Differences; Educational Practices; Educational Research; Foreign Countries; *Functional Literacy; *Health Promotion; *Literacy Education; Literature Reviews; *Patient Education; Social Class; Theory Practice Relationship |
| IDENTIFIERS | *Australia |

ABSTRACT

This booklet, which was developed for adult literacy educators in Australia, summarizes selected research on health practices, communication, and literacy and outlines some issues that adult literacy teachers might consider in their work. The booklet begins with three anecdotes previewing the practical everyday challenges that literacy poses for medical practitioners and the people to whom they provide services. Examined next is the problem of health promotion and providing health services and information to people with limited literacy capabilities. A research project in which health workers and patients in low socioeconomic and high migrant areas are being interviewed about medical practices and literacy is discussed, and ways of connecting literacy, health, ethnicity, and socioeconomic status are presented. Concluding the booklet are eight strategies that literacy instructors can use to help health workers and their clients communicate better. Among the strategies suggested are the following: use health materials in teaching literacy; explore the readability of health materials with students; engage literacy students in a discussion of the problems they present to health providers; and spell out ways clients can request and expect guidelines on accessing available health literacy materials. The booklet contains 16 references. (MN)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

ED 430 088

# Adult Literacy and Health
# Reading and Writing as Keeping-Well Practices
# Research into Practice Series No. 5.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

J Kindler

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)



CE078551



BEST COPY AVAILABLE

# ADULT LITERACY AND HEALTH

## - reading and writing as keeping-well practices

*by Peter Freebody and Jill Freiberg*

number 5
RESEARCH INTO PRACTICE SERIES

BEST COPY AVAILABLE

# ADULT LITERACY & HEALTH: READING & WRITING AS KEEPING-WELL PRACTICES

Research into Practice Monograph,
Language Australia Adult Literacy Research Node

Peter Freebody & Jill Freiberg
Faculty of Education
Griffith University, Queensland 1997

LANGUAGE AUSTRALIA
The National Languages and Literacy Institute of Australia

National Library of Australia Cataloguing-in-Publication entry

Freebody, Peter.
Adult literacy and health: reading and writing
as keeping-well practices.

Bibliography.
ISBN 1 875578 80 3.

1. Functional literacy - Health aspects. 2. Patient
education. I. Freiberg, Jill. II. Title. (Series:
Research into practice series;).

302.2244

© Language Australia Limited 1997

Published by the Adult Literacy Research Network
Language Australia Limited
ACN 051 438 825

*The views expressed herein do not necessarily represent the views of Language Australia.*

For enquiries regarding the production or marketing of this publication please contact David Dickson at Language Australia Publications, GPO Box 373f Melbourne VIC 3001.

# Introduction

Adult literacy educators have typically focussed on the need for enhanced literacy in education, training, and the workplace. In doing this, they have developed a general sense of the significance of literacy in everyday community life. This monograph attempts to explore more specifically one of those everyday community domains: health practices. Our aim is to summarise some of the research in this area, as it relates to communication generally, and literacy in particular, and to outline some issues that adult literacy teachers might consider in their work.

We begin with three anecdotes that preview the practical everyday challenges that literacy poses for medical practitioners and the people for whom they provide services. The first is about a highly successful specialist whose offices are located in the prestigious "specialist row" of an Australian capital city. When asked about the literacy activities of his patients and its relationships to their health treatment, he said "lots of them know more than I do about their condition. Some of my patients come in with a print-out a foot thick they've got off a web page on the internet last night about their condition, and I say 'Oh, can I borrow that and catch up?'"

The second anecdote takes the form of a comment from a general practitioner (GP) working in a busy surburban practice in a low-socio-economic and high migrant area. In answer to the questions "Are you aware of any patients resourcing themselves on matters of their own health care? Does anybody talk about having read medical dictionaries, encyclopedias, or any of the pamphlets?" this GP comments:

*GP* *Well, we get the TV things, Dr Wright [TV columnist] and stuff like that, you'll get it, or "Women's Weekly" or whatever, like you'll get a run in a day of the symptoms,*

*and by the time you hit the third person you say "Righto, where's it come from? What have they read? Has it been in the paper? Has it been in the "Morris Towers" [newspaper column] on Sunday? Or has it been ... a doctor talk-back program or something like that?" ... by the time you've twigged, if you ask 'em "Where'd you pick these symptoms up? or what happened?" They say "Ah so-and-so said this on TV." And some of them will bring in cuttings out of the paper and do that, ... but they do read, they do watch the TV ... what is causing a problem now is the leaflets, the instruction leaflets that are in the medications, this consumer awareness stuff, 'cos they've read it and reading the side effects, "one in 200 million sort of thing, might get this sort of side effect" and they'll stop taking their pills and come back and ask about it. So they are actually reading in those things.... They're asking more questions and it takes longer.*

*Interviewer* *So reading, do you think, stimulates that?*

*GP* *TV to a great extent. Like we can always tell when the pap smear ads are on, you know, because they come in and say "I haven't had a pap smear." And, you know, I think Sybil did eleven in one morning and she said, you know, "If I have to do another pap smear I'll scream."*

The third anecdote focuses on the relationship of the doctor's use of literacy to enhance service. It concerns a GP in a clinic with several other doctors located in a high turn-around practice with a large number of sessional GPs where a patient is less likely than usual to see the same GP from one visit to the next. The GP pointed out that, generally, doctors were not well-trained in record-keeping, and that, much of the time, he did not bother looking at the written records of a patient's previous visits because the records are "worse than useless". This, he claimed, was an important literacy problem for doctors.

Even at face value, these three anecdotes tell us that literacy and health

enjoy a complex relationship. Both constructs can be thought of, and have often been characterized as a unidimensional, straightforward attribute of a person, often an attribute that is seen as fundamentally a technical or procedural "skill". But even these simple anecdotes offer us a different story, a version of both literacy and health as sets of interrelated cultural practices, highly dependent on context, informed, and themselves informing our other sets of knowledge and assumptions about, for example, gender (*Woman's Weekly*), social class, the uneven access to knowledge in our society, and the ways in which literate practices actually shape not only relationships but differences in something so apparently standard and routinised as a consultation with a doctor.

Anecdotes such as these tell us that patients' literacy practices impact differently on, and emphasise the variety of tasks that are involved in health services provided by specialists and general practitioners. Both doctors and their clients face qualitatively different language and literacy tasks depending on such crucial factors as the degree of clear and known prior diagnosis of the condition under question - a factor that differentiates the practical work required and the valuings entailed in specialist versus general-practice consultations. As a clear example, we see the phenomenon known as "value-switching" (Gunn, Forest & Freebody, 1995) in the anecdotes above, where one practice (e.g., reading about your health) is positively valued when it is done by one group of people (as in the first anecdote above) and negatively valued when done by another (as in the second). So reading about your health can become, in the consultation interaction, either being informed about your condition or complicating and confusing the doctor's diagnostic problem.

Here we approach literacy as an everyday socio-cultural practice and sketch the relevance and benefits of such an approach to our considerations of both literacy and health. The overall argument is that a view of literacy as everyday communicative practices, necessarily embedded in the relationships and politics of everyday social life, offer us new orders of interest and ways of thinking about literacy and health.

# Literacy and health

We can pose the question: How is "the problem" of literacy and health to be construed? Different perspectives offer different answers, but many of the possible answers listed below are widely available in our culture. The problem of health and literacy capabilities is variously seen:

- as a problem of readability of the materials written for public or individual use;
- as a problem of knowledge or cognitive style (global rather than analytic thinking / susceptibility to advertising, quick solutions, etc);
- as a problem of client motivation to learn or implement information;
- as a problem of the large and increasing gap between specialist medical knowledge and community "lay" knowledge;
- as a problem of the protection of a professional elite through opaque communication (in consultation, written communication etc);
- as a problem of "empowerment" of the clientele.

Recently there have appeared several reports of descriptive and intervention programs aimed at documenting and changing the well-established relationship between low levels of education generally and literacy in particular and various aspects of health and health care (e.g., Weiss et al., 1991), a relationship that has particular relevance for adult literacy and ATESOL teachers. Many of these studies have focussed

on safety-related aspects of health (Wallerstein, 1992), or on particular high-incidence diseases such as cancer, mortality (Freeman, 1991; Michielutte, Bahnsoln, & Beal, 1990), and cardiovascular problems, especially as related to diet (Kumanyika & Horn, 1993). In many instances, these research programs have been associated with attempts to intervene educationally (e.g., Evans, 1993; Ward, 1993), attempts that focus much of their attention on the development of what we may term "health-literacy", the set of practices that enable a person to develop, understand and critically act on a growing literacy-based knowledge of health issues - prevention, diagnosis, treatment and the impact of life-style factors.

Much of this attention is, in turn, related to the education of a category of people sometimes described as the "undeserving ill", those people who, through some features of their lives have been placed in circumstances that threaten their health. One of the facts that literacy and health have in common is their robust association, however assessed, with levels of material wealth, referred to sociologically as socio-economic status (SES), a factor itself strongly associated with host-language status. These factors carry with them, in our culture, a constellation of cultural, intellectual, moral, and social-interactive associations. It is largely these associated attributions that are used to account for levels of health, health practices, and health risk, as well as literacy levels.

What most of these studies of people in the categories 'undeserving ill', 'migrant', and 'low SES' have in common is the *a priori* specification of types of people and the attachment by correlation of constellations of health variables to those types. Many studies of health and literacy levels use survey-style research methods to do the necessary work of "mapping the terrain". But they require supplementation on two counts: First, they typify rather than specify the ways in which sub-cultures and individuals deploy their personal and community resources to understand and act on their circumstances, in this case, to maintain and enhance their literacy and health practices; second, they offer no specification of or suggestions about actual and possible practices for

increased access among low-literacy clientele. As such, they ignore some of the more promising outcomes of the recent turn toward anthropological and micro-sociological approaches to studying everyday practices taken by contemporary theorisations of categories of social practice such as literacy and health maintenance and enhancement.

A result of this is a generalised understanding of the literacy-health relationship, leading in turn to a limited set of directions that can be pursued to change health practices. What health workers and adult literacy educators are left with, in the face of static categories of people and the "typical" outcomes of their membership in those categories, is to direct their health-educational efforts to simplifying and glamorising written materials or to pursuing non-literate modes of dissemination such as videos or multi-media presentations in clinics (e.g., Strecher & Bulger, 1993). Again, these directions are important, but, because the focus is diverted from the actual communications that occur between doctors, clinic workers, family members, and patients, "literate" levels and ways of understanding information are assumed, and the ways in which these inputs would impact on everyday preventive and curative practices are left unexamined.

Some notion of communication patterns, including literacy practices, must underlie, however implicitly, any health-educational intervention, as well as any adult literacy program. The assumptions, especially with respect to literacy, held by those health and education workers motivated to develop health-education programs may not be consonant with those held by the low SES/low literacy/high risk groups most particularly targeted. Recently, there have been strong arguments to the effect that literacy educators have overstated the case for a single psychological "commodity" called *literacy*. There are many reasons for the movement away from unidimensional definitions of literacy. Among them is the growing attention, particularly in Australia, to literacy practices out of school, especially of adults in workplace and community contexts (see e.g., Barton, 1994; the collection of papers in Luke & Gilbert, 1993; Street, 1995).

Contemporary literacy theorists have drawn principally on three theoretical resources in the development of more empirically-grounded accounts of literacy: critical social theories, textual and discourse studies, and ethnographic research methods as applied in anthropology and other cross-cultural studies. This loose affiliation of theories focuses attention on the ways in which institutions selectively value certain literacy traditions over others, and on practices that add to or reinforce the forms of order required by society's institutions, for example, the school, the home, the clinic, the hospital, and the workplace. In these ways, certain powerful literacy practices become institutionalised while others become marginalised or devalued (see, e.g., Gee, 1990). The basic position developed within so-called critical/cultural approaches to literacy education has been summarised by Christie and others (1991): That there are certain textual forms that are effective and efficient means of action in any given society at any given time, and that, more particularly, a responsibility of health- and community-education is, at least in part, to educate communities into a secure control over these powerful public everyday forms of acting through literacy practices.

A further orientation is added to contemporary approaches to literacy by anthropologists and cross-culturalists of literacy. Street (1984, 1993, 1995), for example, has presented the view that literacy practices are always and already embedded in particular forms of social activity, and that it is these social activities that need to be understood in their distinctiveness before the nature of the 'competencies' of literacy can be taught or even described as an isolated set of practices. It is an anthropological and cross-cultural perspective that allows literacy and health educators to see the ways in which language usage in its privileged form - written down and institutionalised - works in contexts in which there are contests about class, gender, ethnicity, and generation.

Such an approach seems to have much to offer to adult literacy educators with an interest in health: It focuses attention on the everyday communicative patterns that make up people's attempts to

maintain and enhance their own and their community members' health; it acknowledges that health practices are always embedded in patterns of cultural and technical authority and dominance; and it tries to show how everyday communicative patterns act to position people with respect to relevant knowledge and thus to the health profession in general. It also calls into question the notion that people simply lack or possess literacy, pointing to the ways in which otherwise highly literate people may behave in certain situations, for example, people who are anxious about the health problems that they face, doctors who are poor at record-keeping, specialists who are less informed than their internet-using patients; and how people who are taken to be otherwise uninformed may behave with considerable literate capability at various times, such as patients described as non-literate who exercise caution on the basis of their interpretation of warning statements on prescribed drugs. As one GP put it:

> *What **is** causing a problem now ah is the leaflets, the medication leaflets that are in the medications, this consumer awareness stuff, 'cos they're **reading** it and reading the side effects, y'know, "1 in 200 million" sort of thing "might get this sort of side effect", and they'll stop taking their pills and come back and ask about it. So they are actually reading in those things. ... But those information things, because people who don't have the ability to judge what's really **important** from all the basic side effects are causing a problem.*

Thus, the ideological and institutional "obedience" of the literate activity is more consequential than the strictly measurable capabilities of the community or the difficulty of the written or spoken texts. As Waitzkin (1991) has pointed out and cogently demonstrated, differences between health workers and clients in class, education levels, gender, and ethnicity make communication more difficult and vulnerable to ideological distortion. But three questions that are highly significant for adult literacy educators and their clients remain:

- How can we expand the ways in which medically "at risk" people inform themselves about health practices beyond the consultation room?

- How do their communicative resources give shape to and provide the limits of those attempts at self-informing? and

- How can clients productively present the information they have learned in actual interactions with their doctors?

# Literacy, class and culture

The connections between literacy, class and culture are not visible only through the lens of certain theoretical positions such as the one sketched above. We are currently undertaking a research project that entails, among other things, interviewing health workers and patients in low socio-economic and high migrant areas about medical practices and literacy. In the accounts of general practitioners, for instance, the significance of literacy and the ways it is profoundly embedded in socio-economic and "cultural" levels is apparent, as the examples below indicate.

In the first, a GP is describing the literacy levels of the community in which he works:

> *The people who aren't literate were probably the people who also had, oh I remember one bloke, he was a tradesman's assistant, worked for the railways, and so I think, I don't know, my impression would be that most people that can't read are probably working at fairly working jobs that aren't terribly highly skilled and may have, maybe working in kind of dangerous work situations, and being the lower socio-economic class.*

The comment is essentially an unpacking of the category "people who aren't literate". The location of people in certain kinds of jobs ("working jobs", not "highly skilled" jobs, "dangerous work") is offered as a description, and thus the primary account of the relationship between literacy and culture. The fact is, most of us would recognise this statement as a reasonable and prevalently available proposition about the correlation between literacy and vocational "level". What we should also recognise as educators, however, is that there are strong causal implications in such accounts as well as just

correlational.

In the next example, a GP is answering a question about the literacy levels of the community in which she works:

*GP:* *Literacy abilities? Well I think I said before amongst the working poor, although they're articulate, their written, reading, writing ... tends to be average to poor. Well, they tend to be lower in that ... because in this sort of area ... you get all the people who have been to special schools and invalid pensioners, those sort of people. They tend to gravitate here because of the cheaper rents and the networks that are here in terms of social security, housing commission and the rest of it, so their literacy levels can be awful.*

*Interviewer:* *How do you think literacy levels may impact on health care?*

*GP:* *I think they impact a great deal. I think there's a limit to how much they can read themselves and when they do read, how much they can understand it. The magazines like Woman's Weekly and New Idea seem to be a big source of information for them, mainly because I suppose it's written in the way they can understand. There's a few people who have, sort of, medical books at home but, when they come and ask you something or whatever, it tends to be that they've sort of missed the point a bit.*

Here the account begins with the labelling of a class ("the working poor") and this "class" is expanded in the talk that follows: The working poor are said by this speaker to be composed of certain illustrative categories of people, such as "people who have been to special schools and invalid pensioners". These are taken to be representative, arch-cases, of three categorisations simultaneously: the "working poor", the local community, and low-literates. So these categories are, again, linked at such a deep level that the explanatory connection can be left implicit, as an assumed mutual understanding

between the speakers. For example, the speaker shows no need to explain why "invalid pensioners" are taken to be less literate than any other category of person.

The speaker then goes on to confirm the view that literacy has a considerable impact on health in terms related mainly to comprehension. The community is characterised as either obtaining its information from popular magazines (again, women's magazines) or, in a few cases, medical books. In the first case, because the magazines present simple language, they are comprehensible, but they are still only popular magazines. In the second case, however, the people are described as lacking the literate capabilities to understand what is written. So the characterisation here is not that "the working poor" are inarticulate orally or do not read, but rather that they make the wrong reading choices or do not understand much of what they read when they make the right choices.

In any interview context, it is important to consider the interviewee's statements not in isolation, but rather as an answer to a specific question. In the case above, the speaker's talk needs to be taken as an answer to the question "how do you think literacy levels may impact on health care?" That is, we must consider the assumptions that make the talk a reasoned answer to that question. In this speaker's account, seeking out popular magazines as a source of health information, of itself, is taken to be a problem for health care. So the "working poor" are characterised as culturally predisposed to make inappropriate choices, as well as not being good at reading comprehension.

In the final example, a GP is discussing some features of the community in which she works:

> *I think there's a fairly good spectrum of literacy ability, people who are from fairly chaotic family backgrounds, working class backgrounds where literacy probably wasn't a high priority ....*

Notice the immediate attachment of literacy practices to "family backgrounds" and the explanatory descriptor "chaotic", and the motivational attribution of a lack of "high priority" to the matter of literacy. At the basic explanatory level, then, the connection of "culture", as indexed by the family background, and health and literacy is a significant one. This account contains an expansion of the observations of earlier speakers, in that it pushes the explanatory device into the family hearth, not just into previous schooling or current work conditions. Clearly, these descriptions are related to the doctor's analyses of particular practical problems such as client non-compliance with treatment regimes.

The feature of these examples that is striking, to us at least, is that they can pass as reasonable and relatively unremarkable ways of connecting literacy, health, ethnicity, and SES. While both literacy and health, in some official contexts and in much explicit commonsense talk, are described as measurable sets of skills, it is clear that, in actual talk about the practices of health and literacy, they are profoundly joined by a characterisation of culture. That is, both literacy and health, as constellations of practice, are taken to embody economic, social, moral and intellectual choices that people apparently make for themselves. For the many adults with low levels of host-language literacy, this proposition is not big news, but for the training and assessment of both literacy and health workers, it presents significant conceptual and interactive challenges.

# Ways forward

At the level of conceptualising issues of literacy, socio-economic characterisations and health, and with respect to both literacy instructors and their clients (the students/patients):

1. Use health materials in learning literacy. Health issues are deeply embedded in the community's need for information, and present distinctive literacy demands, from format and vocabulary to critical understandings.

2. Explore the readability of health materials with students, analysing, for example, the connections between specialised and everyday knowledge assumed and constructed in the materials, the use of diagrammatic and graphic symbols in the representation of health knowledge and practices, the formatting conventions that help or hinder understandability, and the construction of 'responsibility' and 'agency' in the materials (e.g., "What are the tasks of sustaining and enhancing health? Whose tasks are these? What are the ways in which the health workers are positioned as experts and helpers?")

3. Consider with students the problem that they present to the health provider, and the context of that provider's prior knowledge of that problem and the consequences of differing levels of prior knowledge for the relevant interactional and interpersonal conduct.

4. Orient to the ideology of health-and-literacy, focussing at least some instructional attention on the accompanying authority and power aspects of the relationships and communications among health workers and community members. This orientation may involve training in persistence and the skills in the seeking of information, and seeking clarification and re-instating topics from earlier in the consultation that still seem unclear.

5. Be alert to our culture's strong tendency to typify people into categories such as "disadvantaged" socio-economic or migrant status; this tendency over-writes attention to the details of the individual and community resources and practices that are made available to people living in their particular circumstances and with the particularities, familial and cultural, of their health practices;

6. Be alert to the details of the varieties of strategies and activities that accompany low levels of literacy capability and how they may differ from site to site and person to person, and the ways these strategies may be built upon to advantage for both doctor and patient.

7. Develop formal and informal written materials for clients concerning their interactions with health workers, including an explicit orientation to themselves as people who can, in appropriate ways, use literate resources to explore their own or their families' health concerns.

8. Spell out, in specific terms, ways in which clients, in interaction with health workers, can request and expect guidelines on how to access available health-literacy materials. Develop in students ways of presenting themselves to, for example, health workers including doctors, as literate people, motivated to use their literate practices to enhance and sustain their and their families' health.

One purpose of our brief discussion here has been to enhance our appreciation of health-literacy issues by pointing to the constellation of attributions attached to the undeserving ill, the undeserving illiterate and the undeserving poor, and by exploring the implications of those attributions for teachers and adult literacy students. The health area opens many orders of productive interest for adult literacy teachers. One of those orders of interest pertains to how health-literacy practices embed us all in various ways into an institution that deals with our

fundamental physical being in the world. Capability in various literate practices has significant consequences for many people with high levels of involvement in health-provision institutions: pursuing claims concerning mistreatment or negligence, requiring operational staff to submit reports on aged-care patients, and so on, are all routine practices whose communicative success is profoundly consequential for both patients and health workers.

In this important respect, teaching and learning health-literate practices are political, sociological, and psychological activities. As our examples above show, this is a politics that is not lost on the students of adult literacy teachers or on the health workers who try to keep them well, and it adds complexity to the interactional tasks faced by doctors and clients as they attempt to co-ordinate the business of health service.

# References


Barton, D. (1994) *Literacy: An introduction to the ecology of written language*. Oxford: Basil Blackwell.

Evans, M. (1993) Cardiovascular Disease Nutrition Education for Low-Literacy Skills. *Mosaic: Research Notes on Literacy*. Vol. 3, No. 3.

Freeman, H. (1991). Race, poverty, and cancer. *Journal of the National Cancer Institute*, 83(8), 526-527.

Gee, J.P. (1990) *Social linguistics and literacies: Ideology in discourses*. London: Falmer Press.

Gunn, S., Forrest, T. & Freebody, P. Perspectives on poverty, schooling, and literacy. In Freebody. P., Ludwig, C. & Gunn, S. *Everyday literacy practices in and out of schools in low socio-economic urban communities*. Report to the Commonwealth Department of Employment, Education and Training, Curriculum Corporation.

Kumaniyaka, S., & Horn, B.V. (1993) CARDES: Cardiovascular Dietary Education System. *Mosaic: Research Notes on Literacy*. Vol. 3, No. 3.

Luke, A. & Gilbert, P. (1993) *Literacy in contexts: Australian Perspectives and Issues*. Sydney: Allen & Unwin.

Michieleutte, R., Bahnsoln, J., & Beal, P. (1990) Readability of the public education literature on cancer prevention and detection. *Journal of Cancer Education*. 1(5), 55-61.

Strecher, V.J., & Bulger, D.W. (1993) The Role of Multimedia in Educating Low-Literate Populations: Using the technology to promote

health and prevent disease. *Mosaic: Research Notes on Literacy*, /vol. 3, No. 3.

Street, B.V. (1984) *Literacy in theory and practice*. Cambridge: Cambridge University Press.

Street, B.V. (1993 / in press) *Cross-cultural perspectives on literacy*. Cambridge: Cambridge University Press.

Street, B.V. (1995) *Social literacies: Critical approaches to literacy development, ethnography and education*. Harlow, UK: Longman.

Waitzkin, H. (1991) *The politics of medical encounters*. New Haven/London: Yale University Press.

Wallerstein, N. (1992) Health and safety education for workers with low-literacy or limited-English skills. *American Journal of Industrial Medicine*, 22, 751-765.

Ward., A.J. (1993) Cancer Control, A community-Based Approach: The Northern Appalachia Leadership Initiative on Cancer. *Mosaic: Research Notes on Literacy*. Vol. 3, No. 3.

Weiss, B.D., Hart, G., & Pust, R.E. (1991) The relationship between literacy and health. *Journal of Health Care for the Poor and Underserved*, 4(1), 351-363.

*The publication of the Research into Practice Series is one strategy to implement the dissemination of research. The aim is to provide a series of booklets on different aspects of adult literacy in order to:*

- *establish a knowledge base regarding adult literacy practice and research*
- *raise awareness about adult literacy*
- *bring research and practice together*

*The authors of the booklets, who are recognised experts in their field, were invited to write for an audience of literacy practitioners in the community, TAFE, university, Skillshare, ACTU, industry and private providers.*

LANGUAGE AUSTRALIA
The National Languages and Literacy Institute of Australia



BEST COPY AVAILABLE